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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,627	08/22/2003	Jian Xu	758.1254USC1	8466

7590 05/05/2004

Attn: Julie R. Daulton  
MERCHANT & GOULD P.C.  
P.O. Box 2903  
Minneapolis, MN 55402-0903

EXAMINER
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GREENE, JASON M

ART UNIT	PAPER NUMBER
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1724

DATE MAILED: 05/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/646,627

Applicant(s)

XU ET AL.

Examiner

Jason M. Greene

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 19-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 24-35 is/are allowed.
- 6) ☒ Claim(s) 19-22 is/are rejected.
- 7) ☒ Claim(s) 23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 8/22/03; 10/6/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### Claims

1. With regard to claim 19, the Examiner suggests Applicants replace the word "on" at the end of line 11 with the word "of" to improve the readability of the claim language.

### *Double Patenting*

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 19-21 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3 of U.S. Patent No. 6,610,126 B2.

Claim 1 of U.S. Patent No. 6,610,126 B2 claims the same method of instant claim 19 except that claim 1 of the '126 patent additionally claims the media

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construction comprising a corrugated sheet secured to a flat sheet rolled into a coiled construction. Therefore, even though claim 1 of the '126 patent and instant claim 19 are not identical, claim 1 of the '126 patent anticipates instant claim 19 since the media of claim 1 of the '126 patent reads on the instantly claimed media of claim 19.

Claims 2 and 3 of the '126 patent recite the same additional limitations as instant claims 20 and 21.

4. Claim 22 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,610,126 B2 in view of Tokar et al. '364.

As noted above, claim 1 of the '126 patent claims the media construction comprising a corrugated sheet secured to a flat sheet rolled into a coiled construction.

Claim 1 of the '126 patent does not claim the coiled construction being rolled around a core.

Tokar et al. '364 teaches a similar filter wherein a coiled, fluted filter is wound around a core construction (66) in Fig. 8.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the core construction of Tokar et al. '364 into the method of claim 1 of the '126 patent to provide additional radial support for the coiled filter element.

***Allowable Subject Matter***

5. Claims 24-35 are allowed.
6. Claim 23 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
7. The following is a statement of reasons for the indication of allowable subject matter:

With regard to claim 23, the prior art made of record does not teach or fairly suggest the method of claim 22 wherein the step of providing a filter element includes providing a filter element including a frame and the radially directed seal member, the frame securing the radially directed seal member to the media construction, the frame having a skirt and an axial extension, the skirt circumscribing and securing the frame to the media construction, the axial extension projecting axially from the second end of the media construction, the axial extension having an annular portion, the annular portion of the axial extension supporting the radially directed seal member, the core construction having a first end, including a pair of deflectable flanges, the core construction being releasably secured to the frame.

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With regard to claims 24-32, Tokar et al. '364 discloses a filter arrangement (60) comprising a media construction (62) comprising a plurality of flutes (24), a first end, an opposite second end, said plurality of flutes comprising inlet flutes and outlet flutes, said inlet flutes being open at a portion adjacent to said first end and closed at a portion adjacent to said second end, and said outlet flutes being closed at a portion adjacent to said first end and open at a portion adjacent to said second end, a frame (58) secured to said media construction, said frame having an axial extension, said axial extension projecting axially from said second end of said media construction, a first seal member (59) secured to said axial extension in Fig. 8 and col. 5, lines 39-57.

The prior art made of record does not teach or fairly suggest the filter arrangement of claim 24 wherein a second seal member is secured adjacent to the first end of the media construction.

With regard to claims 33-35, Tokar et al. '364 discloses an air cleaner comprising a housing including a body member (54) and a cover (not numbered), said body member defining an interior, a filter element (60) operatively installed within said body member interior, said filter element including a media construction (62) comprising a plurality of flutes (24), a first end, an opposite second end, said plurality of flutes comprising inlet flutes and outlet flutes, said inlet flutes being open at a portion adjacent to said first end and closed at a portion adjacent to said second end, and said outlet flutes being closed at a portion adjacent to said first end and open at a portion adjacent to said second end, a frame (58) secured to said media construction, said frame having

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an axial extension, said axial extension projecting axially from said second end of said media construction, a first seal member (59) secured to said axial extension, said first seal member oriented in a radial direction in Figs. 8 and 11 and col. 5, lines 39-57.

The prior art made of record does not teach or fairly suggest the air cleaner of claim 33 wherein the first seal member forms a radial seal with the housing member, and further including a second seal member secured to the filter element, said second seal member being squeezed between said cover and said body member to form an axial seal therebetween.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Greene whose telephone number is (571) 272-1157. The examiner can normally be reached on Monday - Friday (9:00 AM to 5:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

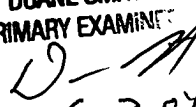
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason M. Greene  
Examiner  
Art Unit 1724



jmg  
May 2, 2004

DUANE SMITH  
PRIMARY EXAMINER  
  
5-3-04